--BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1A illustrates the nucleotide and amino acid sequences of the synthetic gene (Bac 19) and the "native gene" (PF19) of *P. falciparum* described by Chang et al;

Figure 1B illustrates the nucleotide and amino acid sequences of the synthetic gene (Bac 19) and the "native gene" (PF19) of the Uganda Palo Alto isolate of *P. falciparum*;

Figure 1C illustrates the $PfMSP1_{P19}A$ recombinant protein sequence before cutting out the signal;

Figure 1D illustrates the $PfMSP1_{P19}A$ recombinant protein after cutting out the signal sequence;

Figure 2A is an immunoblot using SDS-PAGE of the soluble recombinant $PfMSP1_{P19}$ antigen purified by immunoaffinity of the presence (reduced) or absence (non-reduced) of β-mercaptoethanol;

β^2

Figure 2B is an immunoblot with human antiserum of recombinant purified MSP-1 P19 from *P. vivax* and *P. cynomolgi* under non-reduced (NR), reduced only in the charging medium (R) and irreversibly reduced (IR) conditions;

Figure 3A is an immunoblot of the soluble $PvMSP1_{P42}$ recombinant antigen in the presence of protein fractions derived from merzoites of *P. falciparum* and separately isoelectric focusing in the presence (reduced) or absence (nonreduced) of β-mercaptoethanol;

Figure 3B is a graph illustrating the results of an ELISA inhibition technique of *P. vivax* MSP-1 P42 and P19 antigens by the antiserum of individuals with an acquired immunity to *P. vivax*;

Figure 4 are nucleotide sequences. The underlines oligonucleotides originate from *P. vivax* and are used as primers in a PCR reaction. The lower portion of Figure 4 illustrates the percent identity between two isolates of *P. vivax* and *P. cynomolgi*;

Figure 5 are curves illustrating the variation in the measured parasitemia as the number of parasited red blood cells per microliter of blood as the function of time passed after infection. Curve A corresponds to the average values observed in three vaccinated monkeys and curve B corresponds to the average values in five controls;

Figure 6A is a graph illustrating the parasitemia observed in non-vaccinated control animals as a function of time after injection;

Figure 6B is a graph illustrating the parasitemia observed in control animals which contained a saline solution also contain Freunds adjuvant as a function of time after injection;

Figure 6C is a superposition of Figures 6A and 6B;

Figure 6D is a graph illustrating parasitemia at the end of vaccination with p42 as a function of time;

B2 cont.

Figure 6E is a graph illustrating parasitemia in animals vaccinated with p19 alone as a function of time;

Figure 6F is a graph illustrating parasitemia in animals with a mixture of P42 and P19 as a function of time;

Figure 6G is the data obtained to produce the graphs in Figures 6A to 6F;

Figure 7A is an immunoblot illustrating the *in vivo* response of monkeys to injections of p19 with Freunds adjuvant (1), with alum (2) and in the form of liposomes (3);

Figure 7B is an immunoblot illustrating the *in vivo* responses of a squirrel monkey after three injections with p19 with Freunds adjuvant, with alum and in the form of liposomes;

Figure 8A is a graph illustrating the percent parasitemia versus days post infection of six monkeys which were immunized with recombinant MSP-1(p19) six months earlier;

Figure 8B is a graph illustrating the percent parasitemia versus days post infection of

six monkeys that were immunized with normal saline and an adjuvant;

Figure 8C is a graph illustrating the percent parasitemia versus days post infection of monkeys that were used as controls;

Figure 8D is the data obtained to produce the graphs of Figures 8A to 8C;

Figure 9A is a graph illustrating the percent parasitemia versus days post infection of 2 macaques immunized with recombinant p19 and alum;

Figure 9B is a graph illustrating the percent parasitemia versus days post infection of 2 macaques immunized with recombinant p19 and alum;

Figure 9C is a graph illustrating the percent parasitemia versus days post infection of a macaque immunized with p19;

Figure 9D is a graph illustrating the percent parasitemia versus days post infection of 3 control macaques immunized with physiological water and alum;

Figure 9E is the data obtained to generate the graphs in Figures 9A to 9D;

B^2 cont.

Figure 10A is a graph illustrating the percent parasitemia versus days post infection in a squirrel monkey immunized with MSP-1 p19 and alum;

Figure 10B is a graph illustrating the percent parasitemia versus days post infection in a squirrel monkey immunized with MSP-1 p19 and Freunds;

Figure 10C is a graph illustrating the percent parasitemia versus days post infection in a squirrel monkey immunized with MSP-1 p19 with liposomes;

Figure 10D is a graph illustrating the percent parasitemia versus days post infection in a squirrel monkey immunized with alum as the control;

Figure 10E is a graph illustrating the percent parasitemia versus days post infection in a squirrel monkey immunized with Freunds as the control;

Figure 10F is a graph illustrating the percent parasitemia versus days post infection in